



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,639	12/26/2006	Willbald Konrath	4015-5820	5757
24112 7590 04/16/2009 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			EXAMINER ARBES, CARL J	
			ART UNIT 3729	PAPER NUMBER
			MAIL DATE 04/16/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,639	Applicant(s) KONRATH ET AL.	
	Examiner C. J. Arbes	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>herein</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicants' counsel indicated that applicants would not accept a proposed amendment subsequent to a Notice of Allowance after the Office discover what is believed to be more pertinent prior art. The proposed Examiner's Amended was to clarify allowed claim 11. Applicants failed to accept the proposed Amendment in view of the newly found reference i.e. the teaching of Onitsuka (Cf. hereinbelow) and therefore the Application has to be re-opened. Further re-consideration the claimed invention resulted in the following **Non-Final Office Action**.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 11-21 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The specification does not disclose sufficient information to allow a PHOSITA to practice the claimed invention inasmuch as it cannot be seen or understood how the gripper is able to perform the limitation...an abutment surface that abuts against at least two opposite edges of a surface of the circuit component that faces away from the circuit substrate (Cf. claim 20). Moreover assuming that the gripper is not always holding the component in a plane parallel to the circuit board's surface Applicants do not provide sufficient disclosure to allow a PHOSITA to construct the apparatus to perform the claimed invention. To anticipate a possible and interesting question that may be raised by Applicants i.e. the instant Application recites only method claims and therefore the apparatus by which the method claims are carried out Judge Gajarsa in *National Recovery Technologies, Inc. v. Magnetic Separation*

Art Unit: 3729

Systems, Inc. et al (166 F3d 1190) opined that ... the enablement requirement of Section 112 (of 35 U.S.C. 35 demands that the patent specification enable “those skilled in the art to make and use the full scope of the claimed invention without undue experimentation... . In the instant Application Applicants have not adequately disclosed at least how the gripper can have an surface that abuts at least two opposite edges of a surface of a circuit component that faces away from the circuit substrate.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-21, assuming the disclosure is enabling, are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants recite that there is a “target distance from the surface of a circuit substrate at which adhesive is applied... (cf. claim 11) The Office’s position and therefore holds that the language “target distance” is not well-defined. Is this distance measured vertically from the plane of the circuit substrate? If so, to which portion of the component’s surface is the “distance” measured? If the component is in a non-parallel position to the circuit substrate then there are many “target” distances. Applicants are requested to clarify what they intend by this language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-21, assuming that the disclosure is enabling and further assuming that the claims are not unclear, vague or indefinite, are further rejected under 35 U.S.C. 103(a) as being unpatentable over Onitsuka (Pat. Doc. 2002/0004980 A1); hereinafter Onitsuka.

Onitsuka teaches an adhesive applicator and a method of mounting a component onto a PCB. Onitsuka also teaches two or more bonders for pressing the electronic component onto the PCB as well as a feeder for supplying the component to the PCB. Onitsuka also teaches a recognizer for detecting the component held by the mounting means. A first gripper 39a holds a circuit component (3) from a component centering unit (36) and then the component is moved by a mounting head (38) in the direction of the arrows (shown in Figure 3) to a position at which the 1st gripper is disposed above the circuit substrate (as seen in Figs. 6B & 6C). Adhesive (2) is placed by the component as the component is mounted onto the substrate. The 1st gripper is then raised and it is moved away from the circuit substrate. (as shown by the arrows in Figure 3). A 2nd gripper (39b) mounts the component (4) onto the circuit substrate. The movement of the gripper 39a (along the arrows seen in Figure 3) after mounting component (3) on the substrate. This movement can be and is construed as “turning the gripper around an axis. that is perpendicular to the surface of the circuit substrate... As applied to claim 12 it is held to have been obvious to provide a detection system whereby the gripper reaches a predetermined opposing force and then either stops or retracts with the component. This

Art Unit: 3729

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563.

The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Banks, can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/C. J. Arbes/

Primary Examiner, Art Unit 3729